

(c) Remarks

The pending claims under examination are 1, 3, 5 and 17 with claims 1 and 17 the independent claims. Claims 1 and 17 were amended to clarify the intended invention.

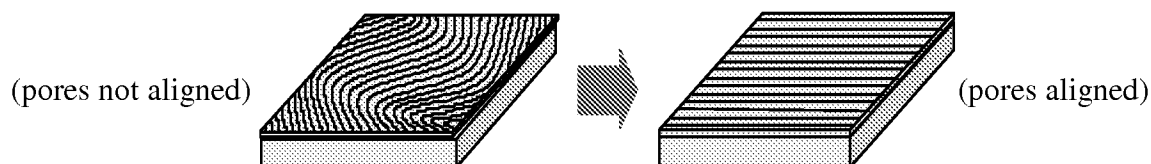
Reconsideration of the claims is expressly requested.

Support for the amendments to claims 1 and 17 is found, *inter alia*, on page 21, lines 7-18; and page 23, lines 7-21.

Claims 1, 3, 5 and 17 were rejected as obvious over Stucky '705 in view of Nogues '980 and Miyata. The Examiner takes the position that it would have been obvious for one of ordinary skill in the art to apply US 5,076,980 (Nogues) to WO 99/37705 (Stucky) to achieve the purpose of preventing cracks introduced in a drying process. Claims 1, 3, 5 and 17 were provisionally rejected as an obviousness-type double patenting of Claims 1-4 and 7 of Application Number 11/267,156 ('156 Application) in view of Miyata. All the grounds of rejection are respectfully traversed.

In order to achieve a prima facie case of obviousness, the prior art must suggest to the artisan each of the claimed steps of the present claimed process. One step involves drying a solvent of the reactant solution at a humidity content of 10 to 30%. This allows solvent removal without cracking the film. However, when the solvent is removed, the pores of the mesostructure are not aligned in a uniaxial orientation as shown in the left hand illustration below. However, when retaining the substrate for which the solvent has been dried in an atmosphere of a relative humidity from 70% to 100%, the pores of the mesostructure are aligned in parallel to a uniaxial orientation (right-hand illustration below and Fig. 6). A second step involves forming the mesostructured film having assemblies of the surfactant oriented in a predetermined direction after the drying step, while retaining the substrate in a water-vapor containing atmosphere at a

relative humidity of 70% to 100%. This feature achieves the beneficial effect of improving regularity of the mesostructure to promote crystallization of the pore walls.



As admitted by the Examiner, Stucky does not teach forming a mesostructured film at a temperature of 100°C or less in a vapor-containing atmosphere at a RH of 70-100%. Stucky also fails to teach retaining the substrate at a RH from 10 to 30% to dry the solvent from the reaction solution (without adversely effecting the film). The defects of Stucky are not remedied by Nogues.

Nogues fails to teach a solvent drying step at a low humidity from 10 to 30% and/or a step of aligning mesopores by exposing the substrate to a humidity from 70-100% after solvent removal.

Nogues teaches a solidified gel is placed in an aging oven. In the oven, shrinkage occurs to strengthen the gel network, col. 4, lines 46-52. The shrinkage occurs without drying, (emphasis supplied), col. 4, lines 47-49.

After aging, the gels are then dried in a high humidity environment. Therefore, solvent is expelled from the gel at high humidity. There is no disclosure of alignment of mesopores at this stage. In fact, in col. 5, lines 56-64, Nogues teaches that the drying of solvent at high humidity requires ventilation to allow solvent to escape from the gel without pressure build-up, which could cause sudden expulsion of water. To complete the drying, a second heating at low humidity is employed.

Therefore, the combination of Stucky and Nogues fails to raise a prima facie case of obviousness.

Claims 1, 3, 5 and 17 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4, and 7 of copending Application No. 11/267,156 in view of Miyata. The Examiner indicated that even though the conflicting claims are not identical, they are not patentably distinct from each other. Once all the rejections, except for the double patenting rejection, are withdrawn, Applicants will file the appropriate Terminal Disclaimer to resolve the double patenting rejection.

The claims should be allowed and the case passed to issue.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

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